What is claimed is

1. A watercraft steer-by-wire control system comprising:

an input device;

at least one transducer in operable communication with the input device;

a rudder control system in operable communication with the input device and configured to control a rudder of a watercraft; and

a bow thruster control system in operable communication with the at least one transducer and configured to control a bow thruster of the watercraft.

2. The watercraft steer-by-wire control system of claim 1, wherein the input device is a hand wheel.

3. The watercraft steer-by-wire control system of claim 1, wherein the input device is configured to have a first degree of freedom and a second degree of freedom.

4. The watercraft steer-by-wire control system of claim 3, wherein the first degree of freedom is a rotational degree of freedom and is configured to control the rudder direction of the watercraft.

5. The watercraft steer-by-wire control system of claim 3, wherein the second degree of freedom is a reciprocating degree of freedom and is configured to control the bow thrusting of the watercraft.

6. The watercraft steer-by-wire control system of claim 3, wherein the second degree of freedom is substantially on a plane that is normal to the input device and is configured to control the bow thrusting of the watercraft.

7. The watercraft steer-by-wire control system of claim 1, wherein the input device is configured to put the bow thruster into one of two modes, a yaw mode and a translation mode.

8. The watercraft steer-by-wire control system of claim 7, wherein when the bow thruster is in the yaw mode, the bow thruster assists in turning the watercraft in the same direction as the rudder.

9. The watercraft steer-by-wire control system of claim 7, wherein when the bow thruster is in the translation mode, the bow thruster assists in translating the watercraft in the same direction as the rudder.

10. The watercraft steer-by-wire control system of claim 1, wherein the bow thruster will activate only when the input device is in a thruster control zone.

11. The watercraft steer-by-wire control system of claim 10, wherein the thruster control zone is limited by a travel stop of the input device.

12. The watercraft steer-by-wire control system of claim 11, wherein the travel stop is configured to vary with the watercraft speed.

13. The watercraft steer-by-wire control system of claim 1, wherein the bow thruster will not activate when in a on center zone.

14. The watercraft steer-by-wire control system of claim 10, wherein the thruster control zone is configured to vary with watercraft speed.

15. The watercraft steer-by-wire control system of claim 1, wherein the on center zone is configured to vary with watercraft speed.

16. The watercraft steer-by-wire control system of claim 1, wherein the bow thruster is configured to apply a force that will push the watercraft in a direction normal to the stern-to-bow centerline of the watercraft.

17. The watercraft steer-by-wire control system of claim 1, wherein the bow thruster is configured to apply a force to the watercraft in a range of angular directions.

18. The watercraft steer-by-wire control system of claim 1, wherein the bow thruster is configured to operate at a constant speed.

19. The watercraft steer-by-wire control system of claim 1, wherein the bow thruster is configured to operate at a variety of speeds.

20. A bow thrust input device comprising:

an input device with a first degree of freedom and a second degree of freedom;

at least one transducer in operable communication with the input device; and

wherein the at least one transducer is configured to measure change in the second degree of freedom and transmit a signal to a bow thruster control system.

21. The bow thrust input device of claim 20, wherein the first degree of freedom is a rotational degree of freedom.

22. The bow thrust input device of claim 20, wherein the second degree of freedom is a reciprocating degree of freedom.

23. The bow thrust input device of claim 20, wherein the second degree of freedom is substantially on a plane that is normal to the input device.

24. A watercraft control system comprising:

a bow thrust input device with a first degree of freedom and a second degree of freedom;

at least one transducer in operable communication with the bow thrust input device and is configured to measure change in the second degree of freedom;

a bow thruster control system in operable communication with the at least one transducer and a bow thruster; and

wherein the watercraft control system is configured to convert second degree of freedom movement of the bow thrust input device into a signal that controls the operation of the bow thruster.

25. The watercraft control system of claim 24, wherein the second degree of freedom is a reciprocating degree of freedom.

26. The watercraft control system of claim 24, wherein the second degree of freedom is substantially on a plane that is normal to the input device.

27. The watercraft control system of claim 24, further comprising:

a rudder control system in operable communication with the bow thrust input device; and

wherein the watercraft control system is configured to convert first degree of freedom movement of the bow thrust input device into a signal that controls the operation of a rudder.

28. The watercraft control system of claim 27, wherein the first degree of freedom is a rotational degree of freedom.

29. A method for maneuvering a watercraft, the method comprising:

applying a force in a first degree of freedom of an input device;

measuring the movement of the input device in the first degree of freedom;

converting the movement into a signal proportional to the amount of movement; and

transmitting the signal to a bow thruster control system.

30. The method of claim 29 further comprising:

applying a force in a second degree of freedom of an input device;

measuring the movement of the input device in the second degree of freedom;

converting the movement into a signal proportional to the amount of movement; and

transmitting the signal to a rudder control system.